

Claims

1. Metal/plastic hybrid which comprises a thermoplastic, a metal compound melting in the range between 100°C and 400°C and an electrically conducting and/or metallic filler.
2. Metal/plastic hybrid according to Claim 1, whereby the proportion of the metal alloy melting in the range between 100°C and 400°C and of the electrically conducting and/or metallic filler is ≥ 60 % by weight.
3. Metal/plastic hybrid according to one of the preceding claims, which has a specific volume resistance of less than $10^{-2} \Omega\text{cm}$ and/or a thermal conductivity of $> 5\text{W/mK}$.
4. Metal/plastic hybrid according to one of the preceding claims, whereby the electrically conducting and/or metallic filler is fiber shaped and/or particle shaped and comprises a metal, a metal alloy, carbon black, carbon fibers and/or an intrinsically conducting polymer.
5. Metal/plastic hybrid according to one of the preceding claims, whereby the length of the fibers lies between 1 and 10 mm, the thickness is $< 100 \mu\text{m}$ and/or the size of the particles is $< 100 \mu\text{m}$.
6. Metal/plastic hybrid according to one of the preceding claims, in which the metal compound melting in the range between 100°C and 400°C includes proportions of bismuth, zinc and/or tin.
7. Shaped body, manufactured by means of a usual plastic shaping process, which is at least in part manufactured from a metal/plastic hybrid, whereby the metal/plastic hybrid comprises a thermoplastic, a metal compound melting in the range between 100°C and 400°C and an electrically conducting and/or metallic filler.

8. Use of a hybrid according to one of Claims 1 to 6 in electrical engineering, electronics, in electromagnetic devices and/or for heat dissipation.